

TWIN PEAKS WILDERNESS STUDY AREA

1. THE STUDY AREA - 90,791 acres

The Twin Peaks WSA (CA-020-619A) is located in Lassen County, California (33%) and in Washoe County, Nevada (67%). Nearest cities are Susanville, California, 55 miles southeast, and Reno, Nevada, 80 miles south. The WSA contains 90,791 acres of public land and surrounds 1,257 acres of private land located in 12 parcels varying in size from 40 to 320 acres. Surface owners own all subsurface mineral rights.

The WSA is bounded primarily by dirt roads. Small sections of the boundary are composed of non-public land. The western boundary is the Smoke Creek Ranch, private land, and the Smoke Creek Reservoir Road. The southern boundary is formed by portions of the Burro Mountain road and an underground communication cable right-of-way. The eastern boundary follows the Sand Pass-Gerlach road, an unnamed north-south road and the Buffalo Meadows road. The northern boundary follows the Parsnip Creek road, the Mixie Flat road and the Horne Springs-Painter Flat road. On the northern boundary a cherrystemmed road extends from Mixie Flat 2.5 miles into the WSA (see Maps 1 & 2).

The WSA is located on the western edge of the arid Great Basin and on the southeastern edge of the volcanic Modoc Plateau. An area approximately 10 miles by 18 miles comprises the WSA and is characterized by eroded volcanic peaks, ridges and plateaus. Elevations range from 3,900 on the edge of the Smoke Creek Desert in the southeast corner of the WSA to 6,592 on the highest summit of the WSA, Twin Peaks. Low rolling hills make up the northwest portion of the WSA. The central portion of the WSA is more rugged, comprised of numerous peaks and canyons, and on the east, the WSA's lower slopes taper into Buffalo Creek Canyon and the Smoke Creek Desert.

Plant life is a mixture of big and low sage, grasses and sparsely-scattered junipers. A perennial stream, Buffalo Creek, flows for 8 miles along the arid WSA's eastern side. Smoke Creek, another perennial stream, flows for 5 miles through the WSA's western edge.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various alternatives were analyzed in the Draft and Final Eagle Lake-Cedarville Wilderness Environmental Impact Statements (EIS). Three (3) different alternatives were analyzed in the EIS: a partial wilderness alternative, which is the recommendation of this report, where 54,916 acres would be designated wilderness and 35,875 acres released for uses other than wilderness; an all wilderness alternative and a no wilderness alternative.

2. RECOMMENDATION AND RATIONALE - 54,916 acres recommended for wilderness 35,875 acres recommended for nonwilderness

The recommendation for this WSA is to designate 54,916 acres as wilderness and release 35,875 acres for uses other than wilderness (Map 1). The all wilderness alternative is the environmentally preferred alternative because it would result in the least change from the existing natural environment over time. The selected alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

This constitutes BLM's report for the entire WSA. No report for this WSA appears in the California Statewide package. Within California 7,079 acres (8% of the WSA) are recommended for wilderness and 18,598 acres (20% of the WSA) are recommended for other uses. Within Nevada 47,837 acres (52% of the WSA) are recommended for wilderness and 17,277 acres (19% of the WSA) are recommended for other uses.

The partial wilderness recommendation is primarily based on the outstanding wilderness characteristics found in the recommended parcel. This area does not contain any serious resource conflicts. The areas not recommended for wilderness received their recommendations based on their lower value wilderness characteristics, common uninteresting routine nature of the landscape and resource conflicts. The conflicts are with motorized use, associated with hunting, and the need for utility corridors.

The area recommended for wilderness provides excellent opportunities for solitude and primitive recreation in a large rugged land area that is natural in appearance. The numerous mountains, canyons, rims, and ridges form a rugged area largely unaffected by the imprint of man. Of particular interest are, Buffalo Creek and Smoke Creek Canyons. The sinuous canyons and riparian zones along these two perennial streams add special scenic, ecological, and wildlife interest to the area. Year-round water supplies provide habitat and watering areas for a broad spectrum of desert and aquatic species. Even trout can be seen in the aquatic habitat of Smoke Creek. Opportunities for viewing wildlife are good with deer, antelope, chukar and golden eagles prevalent. Opportunities for viewing wild horses and burros are also good.

Solitude is readily available throughout the recommended wilderness area. Broad vistas across volcanic tablelands to symmetrically shaped volcanic mountains to the north and west and expansive views east and south across Smoke Creek desert give the area visitor a feeling of remote isolation. Most adjacent lands are public and undeveloped. Land uses outside the WSA do not and are not expected to adversely affect the experience of solitude within the proposed wilderness area. Solitude is also readily available within the numerous canyons that dissect the mountainous area that comprises the recommended wilderness area.

Primitive recreational opportunities are plentiful in the recommended wilderness area. Twin Peaks and the many canyons that lead to it and surrounding peaks offer a wide variety of hiking, horseback riding and sightseeing opportunities. Numerous springs and two perennial streams provide water. Portions of the Smoke Creek Archaeological District are located within the southwestern part of the recommended wilderness area. Observation of high quality petroglyph panels, hunting blinds and habitation caves add special intrigue for visitors interested in exploration and historical interests. Eight miles of primitive travel routes would be closed.

Through boundary adjustments, resource conflicts have been eliminated within the recommended area.

No significant energy or mineral values have been identified within the recommended wilderness area. There are no mining claims in the area.

In the areas not recommended for wilderness, parcel A was separated from the recommended wilderness primarily because it is characterized by flat low rolling hills that are more drab and monotonous than the central mountainous core of the unit. The wilderness characteristics of solitude and naturalness are lower than the core area which has much more topographic diversity. Most of existing ways and other small man-made features are in parcel A causing it to be less natural than the pristine core area. A secondary reason for dropping parcel A is that this area is regionally important for upland game hunters who rely on motorized access to get to the hunting areas. The continued use of 6,200 visitor days of hunting associated with motorized access would be possible.

Parcel B was separated from the recommended portion because it could then be used as a utility corridor for future needs. An existing underground telephone cable line formed the southern boundary of the WSA. The issue of the need for a wider corridor along this route was introduced by a utility company study that identified this corridor as one of the last remaining east-west utility corridors in northern California. This was their highest priority route for future expansion.

Altogether in both parcels A&B there are approximately 30 miles of routes of travel including primitive ways and other unmaintained routes of access which will remain available for vehicular use.

Table 1
Land Status and Acreage Summary of the Study Area

<u>Within Wilderness Study Area</u>			
	<u>CA</u>	<u>Acres</u> <u>NV</u>	<u>TOTAL</u>
BLM (surface and subsurface)	25,677	65,114	90,791
Split Estate (BLM surface only)	0	0	0
Inholdings			
State	0	0	0
Private	320	937	1,257
Total	25,997	66,051	92,048
<u>Within the Recommended Wilderness Boundary</u>			
BLM (within WSA)	7,079	47,837	54,916
BLM (outside WSA)	0	0	0
Split Estate (within WSA)	0	0	0
Split Estate (outside WSA)	0	0	0
Total Recommended for Wilderness	7,079	47,837	54,916
Inholdings			
State	0	0	0
Private	0	0	0
<u>Within the Area Not Recommended for Wilderness</u>			
BLM (surface and subsurface)	18,598	17,277	35,875
Split Estate (BLM surface only)	0	0	0
Total BLM Lands Not Recommended	18,598	17,277	35,875
For Wilderness			
Inholdings	320	937	1,257

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

Wilderness Characteristics

A. Naturalness: The Twin Peaks WSA is predominantly natural, with human imprints unnoticeable in the area as a whole. The WSA contains steep canyons, numerous peaks and ridges, many small springs and two perennial streams. Elevations range from 3,900' on the eastern side of the WSA along the edge of the Smoke Creek Desert to 6,572' atop Twin Peaks located in the south central portion of the WSA.

The overall influence of human imprints on the naturalness of the area as perceived by the average visitor is negligible. Human imprints are small in scale mainly related to livestock grazing such as, 17 miles of fence, 9 stock ponds, 24 developed springs, and one well with windmill, 38 miles of access ways leading to various springs and ponds. The ways are also used for hunting. The ways and water developments are substantially unnoticeable, due to the broken terrain and large size of the WSA.

One 1/2-mile long abandoned dirt airstrip located on the south western edge of the WSA was not identified during the initial inventory. It is low profile and is no longer used.

B. Solitude: The Twin Peaks WSA contains outstanding opportunities for solitude. The WSA's large size and the numerous canyons, rims, ridges and peaks provide excellent opportunities to experience solitude.

Livestock operator travel within the WSA is seasonal and infrequent. Hunting is the only regular public use and it occurs from October through December. Some deer hunting occurs throughout the WSA, however, most of the estimated 7,200 visitor days of recreation use are chukar hunters who concentrate along the WSA's south and east sides.

This WSA is periodically overflowed by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude.

C. Primitive and Unconfined Recreation: Excellent opportunities for primitive and unconfined types of recreation occur throughout most of the WSA. While primitive recreation can occur in Parcel A north and west of Al Shinn Canyon, this area's flat benches and gently rolling grass and sagebrush covered hills are not as likely to attract those interested in hiking and exploration as the more rugged area of the WSA recommended for wilderness designation. Hunting, hiking, horseback riding, sightseeing, wildlife observation, and nature study are the major activities best suited to the recommended wilderness area. The area's large size and numerous canyons, rims, ridges and peaks provide excellent opportunities for hiking and exploration. Water is limited.

D. Special Features: The Smoke Creek Archaeological District is located along the southwestern side of the WSA on both sides of Smoke Creek. It has been declared eligible for National Register status by the California State Historic Preservation Officer. The district extends 1/2 to 1 mile wide along Smoke Creek as well as 1 to 2 miles up major tributaries of Smoke Creek that drain south and west from within the WSA. Archaeological resources in the district include high quality petroglyph panels, habitation caves and hunting blinds. All of the district lies within the WSA and 50% of the district is included within the area recommended for wilderness designation.

Diversity in the National Wilderness Preservation System

A. Assessing the diversity of natural systems and features as represented by ecosystems: Wilderness designation of the Twin Peaks WSA would not add a new ecosystem or landform to the National Wilderness Preservation System (NWPS). This WSA is in the sagebrush-steppe desert ecosystem. At the present time, there are four existing wilderness areas; Jarbidge and Santa Rosa in Nevada, South Warner in California and Craters of the Moon in Idaho, within this ecotype.

Table 2
Ecosystem Representation

Bailey-Kuchler Classifications Province/PNV	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	Areas	Acres	Areas	Acres
	<u>NATIONWIDE</u>			
Intermountain Sagebrush Province/ Sagebrush Steppe	4	131,199	138	4,356,340
	<u>CALIFORNIA</u>			
Sagebrush Steppe	1	31,295	14	689,514
	<u>NEVADA</u>			
Sagebrush Steppe	2	86,907	34	1,252,442

B. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: This WSA is within a five hour drive of 5 major population centers. Table 3 summarizes the number and acreage of designated wilderness areas and other BLM wilderness study areas within a five hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
<u>California</u>				
Chico	16	1,286,873	13	430,822
Redding	15	1,264,503	11	344,633
Sacramento	48	5,039,817	87	2,479,541
Yuba City	44	4,951,805	85	2,459,500
<u>Nevada</u>				
Reno	45	4,967,230	175	6,945,487

C. Balancing the geographic distribution of wilderness areas: The WSA is within a 50 mile radius of 6 BLM WSA's recommended for wilderness designation. The South Warner Wilderness, administered by the Modoc National Forest is the only designated wilderness area within 50 miles of the Twin Peaks WSA.

Manageability (the area must be capable of being effectively managed to preserve its wilderness character).

The entire WSA is manageable as wilderness. However, considerably more effort would be necessary to maintain the wilderness qualities of solitude in the areas not recommended for wilderness compared to the area recommended for wilderness designation.

The area recommended for wilderness could be managed to preserve wilderness values. No current or expected activities in the area would impair wilderness values. The recommended area is entirely BLM land with no private inholdings. Boundaries are manageable and follow ridgecrests, legal lines, private property lines, or boundary roads located in canyons where off road use is limited by steep or rocky terrain.

Closure of four access ways at the recommended area boundaries will be feasible due to terrain features. Through boundary changes the majority of peripheral motorized access ways (30 miles) were deleted from the recommended wilderness area. Closure of the remaining four access ways (8 miles) is necessary to maintain the wilderness qualities of solitude and naturalness in the core of the suitable area. In one area on the southeast side of the recommended area where slopes are broad and open, enforcement may be needed to insure compliance with motorized use closures.

Parcel A, not recommended for wilderness, contains broad open terrain readily accessible to four-wheel-drive vehicles. Numerous ways have been established prior to 1976 to access livestock facilities and popular hunting areas. Hunters have become accustomed to cross-country travel through the open terrain adjacent to these ways. Effective closure of these ways and prohibition of vehicle use through these open areas would require frequent patrol from August through December each year during the fall hunting seasons. Due to the open nature of the terrain and the low growing sagebrush vegetation, any barriers could easily be driven around by drivers determined to enter. A lack of natural barriers or easily recognizable topographic boundary features would make manageability difficult.

Grandfathered livestock grazing plus wild horse and burro management activities can continue to occur under wilderness management policy. These activities will not adversely affect management of the area as wilderness.

Improved management of the recommended wilderness area will result from the establishment of 300' setbacks from existing roads along the wilderness boundary. This will allow for road maintenance activities without compromising wilderness values and will afford wilderness users the opportunity to park off-road but not within the wilderness area.

Management and coordination of military overflights will be a consideration.

Energy and Mineral Resource Values

At the time of the recommendation process for the Twin Peaks WSA, the BLM Unit Resource Analysis (URA) for the Cal-Neva Planning Unit (1980), based on information in the Mineral Resource Inventory (MRI, 1979-1980), described the mineralization of the planning unit. No specific reference was made to the WSA. This may have been based on no known occurrences of significant (economic) mineralization.

BLM data and information from the Barringer Report (1982) in the Affected Environment section of the Eagle Lake-Cedarville EIS (1987), indicated that the WSA has a low favorability for the accumulation of mineral resources. There was no history or visible evidence of locatable mineral activity. The potential for the occurrence of oil and gas resources was unknown. At the time of the EIS all previous oil and gas leases had been allowed to expire by the lessees. The WSA was not considered prospectively valuable for geothermal, sodium, or potassium, and there had been no interest or known development of salable minerals in the WSA. No mining claims were known to exist in the WSA at the time of the recommendation process.

A mineral survey of the suitable portion of the WSA was conducted by the U.S. Geological Survey (USGS), and the U.S. Bureau of Mines (BOM) during 1985. Their final report was published in USGS Bulletin 1706-A (1988). The USGS checked published geologic maps, remapped most of the area, and re-evaluated geochemical data from the Barringer Report (1982). They also sampled selected areas for their own geochemical analysis, collected and evaluated gravity data, and evaluated aeromagnetic and radiometric data. The BOM conducted an extensive literature search for records of past or present mining activity. In addition, the BOM collected 15 placer and 59 rock samples from 17 mineralized sites in the study area.

During the early 1900s, there was some activity (30 mining claims) northwest of the WSA and 2 other claims were staked approximately 2 miles southwest of the WSA. But there was no evidence that mining activity occurred in the WSA. In 1985 there were no active mining claims within or near the study area (Miller, 1987).

The Bureau of Mines sampling confirmed the geochemical anomalies of the Barringer Report (1982) for lead, zinc, silver and copper near Mixie Flat within the WSA. In addition, the new data showed the presence of gold, nickel, tungsten, mercury, and chromium (Miller, 1987). Although the concentration of the samples indicated the Mixie Flat area only has moderate potential for gold, and low potential for copper, and zinc. The entire WSA has low resource potential for copper, tungsten, and zinc based on geochemical sampling. No visible mineralization was observed.

Sampling also identified lake sediments in the southeast and southwest corners of the WSA that have high potential for pozzolan, a porous variety of volcanic tuff or ash used in making hydraulic cement. In 1985, probably the only domestic deposit of pozzolan being mined was the extensive deposit of Lassenite Industries, 50 miles southwest of the study area. The same deposit is mined on a limited basis today. Coal ash is also used for hydraulic cement, and considered the primary competitor with the pozzolan industry.

Lake Shore deposits of sand and gravel are found in many of the stream drainages throughout the study area, but are not classified as potential resources due to their small size and inaccessibility. Oil and gas potential is low. There is an absence of organic-rich rocks that may have been a source of hydrocarbons. There is also a lack of suitable reservoir rocks (Bulletin-1706A).

Interest in mineral exploration indicated by a BLM minerals record search on January 13, 1988 showed that no mining claims or mineral leases existed within the Twin Peaks WSA.

Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness.

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	Proposed Action (Partial Wilderness)	All Wilderness Alternative	No Wilderness/No Action Alternative
Wilderness Values	Naturalness reduced on 1 acre in wilderness and 2 acres in the nonwilderness area due to construction of 4 livestock reservoirs. Naturalness lost on 8,500 acres due to 7 miles of new powerline in the utility corridor. Solitude and primitive recreation would be improved in the wilderness area by closure of 8 miles of ways and elimination of 1,000 visitor days of vehicle oriented use.	Naturalness reduced on 3 acres due to construction of 4 livestock reservoirs. Solitude and primitive recreation would benefit due to the closure of 38 miles of ways and the elimination of 7,200 visitor days of vehicle oriented use. Some illegal trespass by vehicles would occur due to a lack of natural barriers on the boundaries.	Naturalness reduced on 3 acres due to construction of 4 livestock reservoirs and lost on 8,500 acres due to construction of 7 miles of new powerline in the utility corridor. Solitude and primitive recreation are not expected to be impacted as existing levels of use are expected to remain stable for the foreseeable future.
Recreational ORV Use	In the wilderness, closure of 8 miles of ways would displace 1,000 visitor days of vehicle oriented use. In the nonwilderness portion the 30 miles of ways would remain open and continue to receive vehicle use at the current level of 6,200 visitor days/year for the foreseeable future.	Displacement or loss of 7,200 visitor days of vehicle oriented use with closure of the wilderness, including 38 miles of ways, to motorized use.	No impact. Existing vehicle oriented use is expected to remain at the present level of 7,200 visitor days/year.
Trans Sierra Utility Corridor	The highest priority utility corridor proposed is in the area not recommended for wilderness and 7 miles of new transmission line could be constructed. A second lower priority utility corridor in the recommended wilderness area could not be constructed. Since the higher priority corridor could be developed, no significant impact.	There would be no development allowed in either of the proposed utility corridors due to a withdrawal of the wilderness area from right-of-way allowance. The proposed powerlines would have to be built along alternative more expensive routes. The lower priority line would likely not be built.	No impact as construction could proceed within both proposed corridors. It is expected that only the higher priority line would be built.

Local Social and Economic Considerations

No significant local, social or economic considerations were identified through the public input process used to develop the environmental impacts statements for the wilderness study of the WSA. Therefore, no further discussion of this topic will occur in this document.

Summary of WSA-Specific Public Comments

Public Involvement has occurred throughout the wilderness review process. Certain comments received during the inventory process and early stages of EIS preparation were used to develop significant study issues and alternatives for wilderness management.

A Technical Review Team (TRT) was also used to help identify issues and formulate the alternatives analyzed in the EIS. It was used as a tool to lessen the chances of polarization between interest groups and to provide the Bureau with high quality public input, representative of the positions of key groups interested in, or affected by, wilderness designation. Input provided by the Technical Review Team was used in developing the wilderness recommendations for this WSA.

For the Eagle Lake-Cedarville Wilderness EIS that included the Twin Peaks WSA, the Susanville District Advisory Council identified the following interests and resources to be represented on an eight member Technical Review Team:

- Livestock-Adjacent land owners
- Wildlife-Agencies-Sportsmen
- Wilderness-Environmental-Dispersed recreation
- Minerals-Energy-Utilities
- Wild horses
- Motorized recreation
- Cultural-Historical-Archeological
- Bureau of Land Management.

The representatives were very knowledgeable and highly respected members of their interest groups. The TRT members toured the WSA, held lengthy discussions spanning many weeks and eventually reached unanimous agreement that a partial-wilderness recommendation was appropriate for the Twin Peaks WSA. The team's recommendation of 60% suitable and 40% unsuitable was supported by the Susanville District Advisory Council and by BLM and is the recommended action for this WSA.

Key issues raised through public involvement and analyzed by the Technical Review Team and in the EIS were: a wilderness complex where five adjacent WSA's separated only by boundary roads including Twin Peaks WSA would be managed as a wilderness complex inclusive of the road (this was analyzed in the all-wilderness alternative of the EIS); the quality of the wilderness resources and how much was appropriate to be preserved and managed as wilderness; concern that wilderness would prevent potential mineral development, livestock management activities; motorized recreation access for hunting; concern that wilderness would limit management of wild horses and burro populations; concern that wilderness would preclude development of potential high voltage electric transmission lines through the region. All of these issues were addressed in each of the three alternatives analyzed in the EIS: all-wilderness, partial-wilderness (60% suitable, 40% non-suitable) and nowilderness.

During formal public review of the draft EIS a total of 339 comments were received that addressed this WSA specifically or as part of general comments on all WSA's in the draft EIS. Of those 339 comments, 12 were oral statements received at the three public hearings held on the draft EIS and 327 were written comments. In general, 36 respondents supported all wilderness, 7 supported no wilderness and 291 supported partial

wilderness recommended by BLM. Five respondents supported more wilderness than was addressed in the draft EIS.

Those favoring wilderness cited the area's natural character, large size (92,048 acres), opportunities for primitive recreation (mainly hiking and sightseeing) and opportunities for solitude. Inclusion of the area in the National Wilderness Preservation System as a representative of volcanic land forms in the desert shrub ecosystem was also cited.

Those opposed to wilderness cited concern that despite livestock's grandfathered provisions in the wilderness act livestock management activities, particularly motorized access for water facility inspection and maintenance and sheep camp movement, would be restricted. Restrictions or prohibition on development of new water facilities, springs and stock ponds, was also cited as reasons for opposition to wilderness. Others opposed to wilderness cited the elimination of possible mineral development in designated wilderness as a general reason without reference to specific mineral values within the WSA.

All of the following local and state agencies supported the draft EIS partial wilderness alternative where 60% of the WSA is recommended for wilderness and 40% is recommended for uses other than wilderness:

Nevada County (California) Supervisor Joel Gustafson; The State of Nevada through the Nevada Clearinghouse; The Nevada Division of State Parks; The California Department of Fish and Game. Lassen County Board of Supervisors supported the No Wilderness alternative. Washoe County did not submit comments.

Letters were received from two state agencies and five federal agencies that took no positions as to a recommendation on alternatives or acreage to be preserved as wilderness. They were the California Dept. of Water Resources, Nevada Division of Historic Preservation, Bureau of Reclamation, National Park Service, US Fish and Wildlife Service, US Geological Survey and the Environmental Protection Agency.